## TITLE 329 IAC SOLID WASTE MANAGEMENT BOARD

## #05-297

## SUMMARY/RESPONSE TO COMMENTS FROM THE THIRD COMMENT PERIOD

The Indiana Department of Environmental Management (IDEM) requested public comment from May 1, 2007, through May 23, 2007, on IDEM's proposed rule language. IDEM received comments from the following parties:

Bose McKinney & Evans LLP (BME)

Following is a summary of the comments received and IDEM's responses thereto.

Comment: Bose McKinney & Evans LLP offers the following comments to proposed 329 IAC 11-2-28.4. Proposed 329 IAC 11-2-28.4 is insufficient for the following reasons:

1. The definition does not adequately distinguish the plasma arc treatment method from incineration. If the plasma arc treatment method involves combustion, it is essentially incineration, and any such facility would need to be governed by the incineration performance requirements at 329 IAC 11-(17-20). In such event, it would be irrelevant that the heat source for combustion would be supplied by a plasma are, rather than by burning natural gas. However, by creating a definition that labels the process plasma arc treatment, the agency appears to be allowing facility configurations that have a high potential to be defacto incinerator devices powered by a plasma arc, but are not required to meet the requirements of 329 IAC 11-(17-20). (BME)

Response: The purpose of the rulemaking is to amend the solid waste processing facility definition to be consistent with the 2005 legislation. The legislature decided that the facility that uses plasma arc or another source of heat to treat solid waste should be listed as a separate category of processing facilities alongside of incinerators. The existing rule requirements at 329 IAC 11 are adequate to review and evaluate submitted applications and assure environmental protection.

Comment: 2. Unlike the regulatory apparatus set out at 329 IAC 11-(17-20) that govern incineration, the proposed addition of a definition for a purportedly different treatment system, plasma arc, is without any performance criteria. For plasma arc treatment systems that are truly <u>not</u> incineration, the Board, by proposing a definition of plasma arc treatment, is allowing such systems without any performance requirements at all. This is in stark contrast to the extensive performance requirements set out in 329 IAC 11-(17-20). 329 IAC 11-2-16 defines "incineration", and 329 IAC 11-(17-20) contain extensive incineration performance requirements. Rule 11-17 contains detailed requirements for information that must be in the permit application for an incinerator. Rule 11-18 sets out pre-operational requirements. Rule 11-19 sets out certain operational requirements. Rule 11-20 specifics incinerator configuration and minimum combustion temperature and residence times for solid waste incinerators that handle infectious and/or chemotherapy wastes. The Board should not define a technology to be permitted in Indiana without at the same time, promulgating rules that include detailed requirements for the type of information IDEM will require as part of a permit application

and detailed performance criteria. For example, how will the process be monitored to ensure that it is truly non-incineration? How will the process be monitored to ensure that all molecules are truly disassociated into elemental forms? What allowance win be made for the re-combination of elements into compounds that will be present in exhaust gases, particulates, and slag? How will the process be monitored to ensure that dioxins and furans are not created? By defining a new technology for waste destruction (plasma arc treatment) potentially outside the regulatory requirements in 329 IAC 11-(17-20) for incineration, all of the aforementioned issues would be resolved at the discretion of IDEM permit writers. This should not be the case. These issues should be the subject of rulemaking, just as the performance criteria for incineration were set by rule. This is particularly critical because plasma arc technology is unlike routine technologies, such as treatment of infectious waste in autoclaves, where there are many such permitted commercial facilities in many states. PEAT, International, which is the proponent of this proposed rule, is not currently using the plasma arc technology at any commercial permitted waste facility anywhere in the United States.

In conclusion, this new definition should not be added to 329 IAC 11 until such time as performance criteria for the technology are established by rule. The regulated community, as well as other interested stakeholders, deserve to have such criteria fully debated in the context of public rulemaking. (BME)

Response: The purpose of the rulemaking is to amend the solid waste processing facility definition to be consistent with the 2005 legislation. The legislature decided that the facility that uses plasma arc or another source of heat to treat solid waste should be listed as a separate category of processing facilities alongside of incinerators. The existing rule requirements at 329 IAC 11 are adequate to review and evaluate submitted applications and assure environmental protection. Please note that in addition to solid waste permitting, these facilities must meet air emission requirements and may be required to obtain a permit from the Office of Air Quality.